

Oregon Scientific™ VIBRA-TRAINER / VIBRA-TRAINER PRO

Model: (SE112)

User Manual

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INTRODUCTION

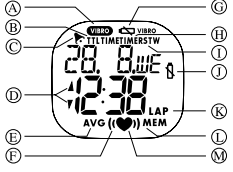





Thank you for selecting the Oregon Scientific™ VIBRA-TRAINER PRO (SE112) watch as your sports fitness product of choice. This precision device includes the following features:

- Fitness index to determine personal heart rate limit for training.
- SMART TRAINING PROGRAM enables you to complete exercise cycles effectively.
- Memory stores heart rate figures during exercise.
- Visual, acoustic, or vibrate alert for heart rate thresholds during training.
- Calorie consumption and percent fat burn display during and after exercise.
- 44 lap memory storage showing average heart rate.
- Alarm clock with stopwatch function.
- Cordless transmission between wristwatch and chest belt.
- Mounting bracket, chest belt and carrying case included.
- Up to 165 feet (50 meters) water resistant (watch unit); chest belt is water resistant up to 32feet (10 meters).

This manual contains important safety and care information, and provides step-by-step instructions for using this product. Read the manual thoroughly, and keep it in a safe place in case you need to later refer to it.

KEY FEATURES

Watch	Item	Button	Press to...
	1	MEM / LAP	Display training records and Mark a lap
	2	MODE	Switch to another mode
	3	LIGHT	Turn on the backlight for 5 seconds
	4	ST / SP / +	View the SMART TRAINING PROGRAM or stopwatch Change a value in setting mode
	5	SET	Enter setting mode Select another setting option Display calorie count and fat burn during training





LCD Display	Item	Icon	Shows when...
	A		Heart rate alert is set to vibrate
	B	TTL TIME	Total exercise time is displayed
	C		Daily alarm is set
	D	▲ or ▼	Current Heart rate is above Upper limit or below Lower limit
	E	AVG	Average heart rate is displayed
	F	(())	Heart rate is above or below limit
	G	 VIBRO	Battery is too low for vibrate function
	H	TIMER	SMART TRAINING PROGRAM is shown or running
	I	STW	Stopwatch is shown or running
	J		Battery is low
	K	LAP	Lap memory is shown
	L	MEM	Memory is shown
	M		<ul style="list-style-type: none"> Heart rate receiving mode is active Blinks when receiving heart rate signal

GETTING STARTED

UNPACKING THE WATCH

When you unpack your VIBRA-TRAINER PRO fitness watch, make sure to keep all the packing materials in a safe place, in case you need to later transport or return the product for servicing.

In the box, you will find:



Watch	Heart rate chest belt	2x CR2032 lithium batteries (already installed)	User manual
			

TURNING ON THE WATCH (First-time use only)

Press any button to activate the LCD Display.

BATTERIES

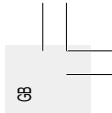
The VIBRA-TRAINER PRO uses two CR2032 lithium batteries – one for the receiver watch and another for the heart rate chest belt. Both are already installed.

When the watch battery is running low, the low battery indicator  displays. The vibration alert will not work when the battery is too low.  VIBRO will display. When the heart rate chest belt battery is exhausted, it stops transmitting signals to the receiver watch.

The batteries typically last one year. We highly recommend that you contact the retailer or our customer service department if you need to replace them. Instructions follow.

To replace the **watch** battery:

1. Turn the watch over so that you are looking at the back plate.
2. Using a small screwdriver, remove the four screws that hold the back plate into position (Figure 1).



3. Remove the back plate and set it aside.
4. With your finger, remove the battery cover plate and set it aside.
5. With your finger, remove the old CR2032 battery and set it aside.
6. Slide the new CR2032 battery into the battery compartment.
7. Replace the battery cover plate.
8. Replace the back plate and screws.

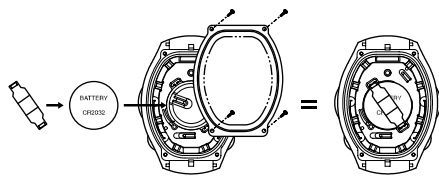


Figure 1

To replace the **chest belt** battery:

1. Locate the battery compartment on the front of the chest belt (Figure 2).
2. With your finger, slide the battery compartment lid counter-clockwise until it clicks out of place.
3. Set the battery compartment lid aside.
4. With your finger, remove the old CR2032 battery and set it aside.
5. Slide the new CR2032 into place, making sure that the connection points touch the contact plate.
6. Replace the battery compartment lid. (+ side upwards)

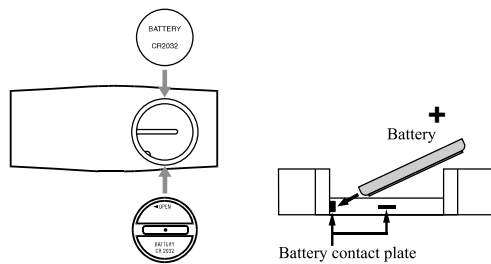


Figure 2





WEARING THE CHEST BELT

The heart rate chest belt is used to count your heartbeat and transmit the data to the watch. To wear the chest belt:

1. Wet the conductive pads on the underside of the chest belt with few drops of water or a conductive gel to ensure a solid contact.
2. Strap the heart rate chest belt across your chest. To ensure an accurate heart rate signal, adjust the strap until the belt sits snugly below your pectoral muscles (Figure 3).

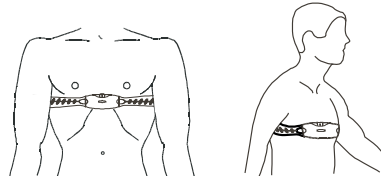


Figure 3


Tips:

- The position of the chest belt affects its performance. Move the chest belt along the strap so that it falls above your heart.
- Avoid areas with dense chest hair.
- In dry, cold climates, it may take several minutes for the chest belt to function steadily. This is normal and should improve with several minutes of exercise.

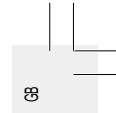
NOTE If the watch is kept idle without receiving a Heart Rate signal for 5 minutes, the Heart Rate mode will quit and return to Clock mode.

ACTIVATING THE BACKLIGHT

Press **LIGHT** to turn on the backlight for five seconds.

NOTE The backlight does not work when the low battery indicator  is shown. This is to conserve battery power, and will return to normal once the batteries are replaced.





SWITCHING BETWEEN OPERATION MODES

Press **MODE** to switch between the five operation modes: real-time clock, alarm clock, user profile, SMART TRAINING PROGRAM, and stopwatch. The modes are described in the sections that follow.

You can run the SMART TRAINING PROGRAM or stopwatch in the background as you access other modes. The icon for the mode that is running will flash until you switch back to that mode.

CHANGING THE SETTINGS

To change the any watch setting (such as time, alarm clock, user profile, etc.)

1. Press **MODE** to switch to the desired mode.
2. Press and hold **SET** until the first setting for that mode flashes.
3. Press **ST / SP / +** to change the setting. Hold to speed through the options.
4. Repeat Steps 2 – 3 to change other settings for that mode.

USING THE CLOCK

USING THE REAL-TIME CLOCK

The real-time clock is the default display for the VIBRA-TRAINER PRO watch, and tracks the time, date, month, and day of week. The clock is programmed with a 50-year auto-calendar, which means you do not need to reset the days of the week and dates each month.

Refer to the "Changing the Settings" section to set the real-time clock.

USING THE ALARM CLOCK

To activate the alarm, press **SET** while the alarm time is displayed. The alarm icon will display whenever the alarm is set. When the feature is activated, a beep will sound at the designated time each day. Press any button to stop the alarm. It will ring at the same time the next day unless you turn the feature off.



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USER PROFILE

To access the full benefits of using the VIBRA-TRAINER PRO sports watch, set up your user profile before you exercise with the watch. This will automatically generate a fitness index, and allows you to track your progress over time.

With the user profile, you can enter information about yourself to help determine your proper fitness index level (described on page 8). The user profile includes the following metrics: sex, age, weight (kg or lbs), height (feet / inches, or centimeters), and activity level.

The activity level is based on your own self-assessment of the amount of exercise you regularly perform.

Activity level	Description
0	Low – You do not usually participate in programmed recreation sports or exercise.
1	Medium – You are engaged in modest physical activity (such as golfing, horseback riding, table tennis, calisthenics, bowling, weight lifting, yard work, or gymnastics) two or three times a week totaling one hour per week.
2	High – You actively and regularly participate in heavy physical exercise (such as running, jogging, swimming, cycling, or skipping rope) or engage in vigorous aerobic exercise (such as tennis, basketball or handball).

Refer to the "Changing the Settings" section to set your user profile.

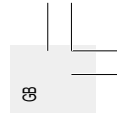
Once you complete your user profile, a fitness index is automatically calculated and displayed for you. Refer to page 8 for a description of the fitness index.

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NOTE You can display and adjust your user profile at any time. For example, if your level of physical activity changes, or you celebrate a birthday, you may want to update your record.

NOTE You must set up your user profile to use the calorie count and fat burn features.

ABOUT THE FITNESS INDEX

Your VIBRA-TRAINER PRO will generate a fitness index based on your aerobic fitness, or your capacity to engage in any form of aerobic exercise. This index is dependent and limited by the body's ability to deliver oxygen to the working muscles in training. It is often measured by maximum oxygen uptake (VO2 Max), which is defined as the highest amount of oxygen that can be utilized when exercising at an increasingly demanding level. The lungs, heart, blood, circulatory system, and working muscles are all factors in determined VO2 Max. The unit of VO2 Max is ml/kg min.

Generally, the fitness range is from 13 to 53. The higher the index, the fitter you are. For your reference, an average 37-year-old man has an index between 39 and 48.

DISPLAYING THE FITNESS INDEX

Press **MODE** to access the User mode. Then, press **MEM** to display your fitness index.

NOTE If you have not completed your user profile, the fitness index will not display.

ABOUT THE SMART TRAINING PROGRAM

It is important to know your maximum heart rate (MHR), your training zone, upper heart rate limit, and lower heart rate limit before you begin any exercise program. These metrics help you achieve the maximum health benefits from your workout.





SMART TRAINING PROGRAM

Your VIBRA-TRAINER PRO watch is equipped with a special SMART TRAINING PROGRAM that tracks your heart rate during exercise. This automatically sets your personal upper and lower heart rate limits, which are monitored as you exercise. Alternatively, you can calculate your own heart rate limits following the instructions below:

Sex	MHR	Lower limit	Upper limit
Men	220 – age = MHR	MHR x (lower training zone %)	MHR x (upper training zone %)
Women	230 – age = MHR		

TRAINING ZONES

There are three training zones, as described below.

Training Zone	MHR %	Description
Health Maintenance	50 – 65%	This is the lowest training intensity level (50 – 65% MHR). It is good for beginners and those who want to strengthen their cardiovascular systems.
Aerobic Exercise	65 – 80%	Increases strength and endurance. It works within the body's oxygen intake capability, burns more calories, and can be maintained for a long period of time.
Anaerobic Exercise	80 – 95%	Generates speed and power. It works at or above the body's oxygen intake capability, builds muscle, and cannot be maintained for a long period of time.

The SMART TRAINING PROGRAM will guide you through from a 5-minute warm up to the end of your exercise program. In addition to monitoring your heart rate and alerting you whenever you fall out of the range for the selected training zone, the Program allows you to check the calories consumed and the percentage of fat burned. You can also check the percentage of calories consumed through burning fat.



USING THE SMART TRAINING PROGRAM



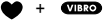
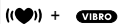
The SMART TRAINING PROGRAM monitors your exercise performance once you enter the parameters (described below) and activate the program.

NOTE You cannot use the stopwatch if you are running the SMART TRAINING PROGRAM.

TO ENTER TRAINING PARAMETERS:

Press **MODE** to access the TIMER mode. Then, press and hold **SET** until "T. Act" displays on the screen. Use the **SET** and **ST / SP / +** buttons to change each setting:

Setting	Options	Description
Training Activity Level	0 – 2	Choose the level of activity that best describes the workout you are planning. Refer to page 7 for a description.
Lower heart rate	Varies	<p>The VIBRA-TRAINER PRO automatically suggests the heart rate limits for you, based on your user profile and the training activity level you set. You can choose to accept or change these parameters; if you change them, be sure that the lower limit does not exceed the higher limit. The watch will automatically adjust the limits if the data entered is out of range or illogical.</p> <p>NOTE You can only set Lower Heart Rate Limit in-between 30-220bpm (beats per minute) and the Upper Heart Rate Limit in-between 80-240bpm.</p>
Upper heart rate		

Alert		Heart rate transmission is active, but no alarm is set.
		Only the sound alarm is on.
		Only the vibration alarm is on.
		All alarms (sound + vibration) are on.
Exercise Time	HH:MM	Set the amount of time that you expect to exercise. The maximum is 99 hours, 54 minutes.

TO START THE SMART TRAINING PROGRAM:

Press and hold **ST / SP / +**.

The SMART TRAINING PROGRAM starts with an automatic five-minute warm-up session. This prepares you for the training ahead. If you wish to skip the warm-up, press and hold the **ST / SP / +** button again. If you continue, three short beeps will sound to mark the end of the warm-up, and again at the end of your training session.

As you exercise, your current heart rate will be displayed. If the heart rate monitor continually reads 0, adjust the chest belt and make sure the receiver watch is the specified distance from the belt (refer to the "Effective Use and Range" section for more information).

TO STOP THE SMART TRAINING PROGRAM:

Press and hold **ST / SP / +**. Once you stop the program, you cannot resume. You must enter a new SMART TRAINING PROGRAM.

TO VIEW CALORIES CONSUMED AND FAT BURN

Press **SET** while the SMART TRAINING PROGRAM is running.

HEART RATE ALERT

The VIBRA-TRAINER PRO is equipped with vibrate and sound heart rate alerts that you can set at your preference. The vibrate alert is useful for times when you do not want to disturb others who are exercising, or when you do not want your competitor to know that you are reaching the limit.

When the alert is activated, a flashing down arrow or up arrow will appear on the display whenever you surpass your heart rate limits. Depending on which setting you selected, the watch will either vibrate, sound with a 2-beep warning, or alert you with both alarms.

The heart rate alert is set with the SMART TRAINING PROGRAM parameters. Refer to the previous section for instructions.

NOTE Using the vibrate feature consumes battery life at a faster rate than the sound alarm.

NOTE If the watch is kept idle without receiving a Heart Rate signal for 5 minutes, the Heart Rate mode will quit and return to Clock mode.

STOPWATCH

Before using the stopwatch, you must enter your training parameters (activity level, upper / lower heart rate limits, heart rate alert, and exercise time – described on page 7). To access the parameters, press **MODE** to access the STW mode. Then press **SET** until "T. Act" shows on the display. Use the **ST / SP / +** and **SET** buttons to update and select each option. Refer to page 7 for a description.

NOTE You cannot use the SMART TRAINING PROGRAM if you are running the stopwatch.

NOTE The stopwatch begins measurement in min : sec : 1/100 sec
After 59 minutes pass, the display will change to hrs : min : sec.



Once the stopwatch is activated, you can perform the following tasks:

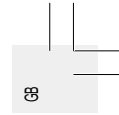
Task	Instruction
Start stopwatch	Press ST / SP / + .
Pause / resume stopwatch	Press ST / SP / + .
Stop / clear stopwatch	Press and hold ST / SP / + .
Save lap	Press MEM / LAP while the stopwatch is running. NOTE Up to 44 laps (99 hours, 59 minutes total) can be stored in the memory.
Show calories consumed and fat burn	Press SET while the stopwatch is running.
Show overall performance	Pause or stop the stopwatch, then press MEM to view: <ul style="list-style-type: none"> • The amount of exercise time within your personal training zone; • Total exercising time and average heart rate; and • Calories consumed and percent fat burn.
Show lap performance	Pause or stop the stopwatch, then press SET until the lap number flashes. Press ST / SP / + to switch between laps. Press MEM / LAP to view individual lap performance.

RECALLING TRAINING DATA

You can check the calories consumed and the percent of fat burn during or after exercise. To recall this data while you are running the SMART TRAINING PROGRAM or stopwatch, press **SET**.

To recall this data after exercise (once the SMART TRAINING PROGRAM or stopwatch is stopped), press **MEM**. The following information is summarized for your training session:





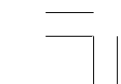
- The amount of exercise time within your personal training zone;
- Total exercising time and average heart rate; and
- Calories consumed and percent fat burn.

To view individual lap performance with the stopwatch paused or stopped, press **SET** until the lap number flashes. Press **MEM / LAP** to view individual lap performance. To switch between laps, press **ST / SP / +**.

CARE INSTRUCTIONS

To ensure you receive the maximum benefit from using this product, please observe the following guidelines.

- Clean the watch and chest belt thoroughly after each training session. Use a soft, slightly moistened cloth. Do not use abrasive or corrosive cleaning agents, as these may cause damage.
- Avoid pressing the buttons with wet fingers, underwater, or in heavy rain, as this may allow water to gain entry into the electrical circuitry.
- Do not subject the product to excessive force, shock, dust, temperature changes, or humidity. Such treatment may result in malfunction.
- Do not tamper with the internal components. Doing so will terminate the product warranty and may cause damage. The main unit contains no user-serviceable parts.
- Do not scratch hard objects against the LCD display as this may cause damage.
- Remove the batteries whenever you are planning to store the product for a long period of time.
- When replacing batteries, use new batteries as specified in this user manual.



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EFFECTIVE USE AND RANGE

The heart rate chest belt and watch have a maximum transmission range of about 30 inches (76 centimeters). If the signal is weak, take the following steps.

- Shorten the distance between the heart rate chest belt and watch.
- Re-adjust the position of the heart rate chest belt.
- Check the batteries. If they are low or exhausted, the range may be less.






You can wear the receiver watch on your wrist or strap it to a bike or exercise machine, as shown below.

Figure 4

Figure 5

AQUATIC AND OUTDOOR ACTIVITIES

The watch is water-resistant up to 165 feet (50 meters). The chest belt is water-resistant up to 32 feet (10 meters), but should not be worn for underwater activities, as the heart rate transmission cannot occur under water. Refer to the table for proper use guidelines.

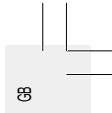
	 RAIN SPLASHES, ETC	 SHOWERING (WARM / COOL WATER ONLY)	 LIGHT SWIMMING / SHALLOW WATER	 SHALLOW DIVING / SURFING / WATER SPORTS	 SNORKELING / DEEP WATER DIVING
30m / 100ft	OK	OK	NO	NO	NO
50m / 165ft	OK	OK	OK	NO	NO
100m / 325ft	OK	OK	OK	OK	NO

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When using the watch for aquatic or outdoor sports activities, observe the following guidelines:

- Do not press the buttons underwater or with wet fingers.
- Rinse with water and mild soap after use.
- Do not use in hot water.

TIPS FOR KEEPING YOUR WATCH FIT:

Keep your watch water resistant! Avoid chemicals (gasoline, chlorine, perfumes, alcohol, hair sprays, etc.). Rinse after use. Reduce exposure to heat. Have your watch serviced by an approved service center once yearly.

TRAINING TIPS

To gain the maximum benefit from your training program, and to ensure that you exercise safely, please observe the following guidelines:

- Start with a well-defined training goal, such as to lose weight, keep fit, improve health or compete in a sporting event.
- Select a training activity you enjoy, and vary your training activities to exercise different muscle groups.
- Start slowly, and then gradually step up your work out as you become fitter.
- Exercise regularly. To maintain a healthy cardio-vascular system, 20 - 30 minutes three times a week is recommended.
- Always allow at least five minutes before and after exercising for warm-up and cool-down.
- Measure your pulse after training. Then repeat the procedure again after three minutes. If it does not return to its normal resting rate, you may have trained too hard.
- Always check with your doctor before starting a vigorous training program



SPECIFICATIONS

Clock:

Time format	12 hr / 24hr
Date format	DD / MM (date / month) or MM / DD (month / date)
Year format	2001-2050 (auto-calendar)

Alarm	Daily alarm
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Stopwatch:

Stopwatch	99:59:59 (hrs:min:sec)
Resolution	1/100sec
Lap counter	44 laps share 99:59:59 (hrs:min:sec)

Smart Training Program:

Timer	99:54:00 (hrs:min:sec)
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Performance tracking:

Heart rate (HR) alarm	Vibrate / sound
HR measuring range	30 – 240 bpm (beats per minute)
Lower HR settable range	30 – 220 bpm (beats per minute)
Upper HR settable range	80 – 240 bpm (beats per minute)
HR zone limit	30 – 240 bpm (beats per minute)
Calories calculation	0 – 9,999 kcal
% fat burning calculation	0 – 99%

Transmission:

Range	30 inches (76 cm) may decrease with low battery)
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Water resistance:

Watch	135 feet (50 meters) (not actuating keys)
Chest belt	32 feet (10 meters)

Power:

Power supply	Watch – 1x CR2032 3V lithium battery Chest belt – 1x CR2032 3V lithium battery
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Operating environment:

Operation temperature	41° F...104° F (5° C ... 40° C)
Storage temperature	-4° F ... 158° F (-20° C ...70° C)

WARNINGS

To ensure you use your product correctly and safely, read these Warnings and the entire user manual before using the product. The warnings given here provide important safety information and should be observed at all times.



WARNINGS

- The product is a precision instrument. Never attempt to take this device apart. Contact the retailer or our customer service department if the product requires servicing.
- Do not touch the exposed electronic circuitry, as there is a danger of electric shock.
- Take precautions when handling all battery types.
- Remove the batteries before storing the product for a long period of time.
- Do not use the chest belt in aircrafts or hospitals. The use of radio frequency products can cause malfunctions in the control devices of other equipment.
- Do not subject the product to impact or shock.
- Check all major functions if the device has not used for a long while. Maintain a regular internal testing and cleaning of your device.
- When disposing of this product, do so in accordance with your local waste disposal regulations.

ADDITIONAL RESOURCES

Visit our website (www.oregonscientific.com) to learn more about your VIBRA-TRAINER PRO sports watch and other Oregon Scientific™ products such as digital cameras, hand-held organizers, alarm clocks, and weather stations. The website also includes contact information for our customer service department, in case you need to reach us.

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